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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/660,970	09/12/2003	Farooq Ullah Khan	2100.020700	6365

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EXAMINER

AJAYI, JOEL

ART UNIT	PAPER NUMBER
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2617

MAIL DATE	DELIVERY MODE
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08/21/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/660,970	KHAN, FAROOQ ULLAH	
	Examiner	Art Unit	
	JOEL AJAYI	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 5-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2, 5-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 14-17, 22 are rejected under 35 U.S.C. 102(e) as being unpatentable over **Attar et al. (U.S. Patent Publication Number 2005/0020295)**.

Consider **claim 1**; Attar discloses a method of wireless communication comprising: transmitting a first sub-frame associated with a first frame (paragraph 39) using a first wireless resource (code channel) (paragraph 31, lines 4-8; paragraph 32, lines 8-14); transmitting a first sub-frame associated with a second frame using the first wireless resource and a second wireless resource (code channels) if (a system that does not use acknowledgements and non-acknowledgements will make the claim invalid) an acknowledgement message associated with the first sub-frame associated with the first frame is received (paragraph 31, lines 4-8; paragraph 32, lines 8-14; paragraph 40); and transmitting a second sub-frame associated with the first frame using the first wireless resource (code channel) and transmitting the first sub-frame associated with the second frame using the second wireless resource (code channel) if a non-acknowledgement message associated with the first sub-frame associated with the first frame is received (a system that does not use acknowledgements and non-acknowledgements will make the claim invalid) (paragraph 31, lines 4-8; paragraph 32, lines 8-14; paragraph 40).

Consider **claims 2, 15**; Attar discloses that the first and second least wireless resources comprise at least one of a channelization code, a channelization tone and an allocate transmit power level (paragraph 31, lines 4-8; paragraph 32, lines 8-14).

Consider **claim 14**; Attar discloses a method of wireless communication comprising: transmitting an acknowledgement message or a non-acknowledgement message indicating whether a first sub-frame associated with a first frame was received using a first wireless resource (code channel) (paragraph 31, lines 4-8; paragraph 32, lines 8-14; paragraph 40); receiving a first sub-frame associated with a second frame using the first wireless resource and a second wireless resource (code channels) if an acknowledgement message is transmitted (a system that does not use acknowledgements and non-acknowledgements will make the claim invalid) (paragraph 40); and receiving a second sub-frame associated with the first frame using the first wireless resource and receiving the first sub-frame associated with the second frame using the second wireless resource if a non-acknowledgement message is transmitted (a system that does not use acknowledgements and non-acknowledgements will make the claim invalid) (paragraph 40).

Consider **claim 16**; Attar discloses receiving the first sub-frame associated with the first frame using at least the first wireless resource (code channel) (paragraph 31, lines 4-8; paragraph 32, lines 8-14; paragraph 40); and failing to receive any sub-frames associated with the first frame before timing out (slot duration) (paragraph 40).

Consider **claim 17**; Attar discloses awaiting reception of the second sub-frame of a plurality of sub-frames associated with the first frame using at least the first wireless resource

(code channel) in response to transmitting the non-acknowledgement message associated with the first frame (paragraph 31, lines 4-8; paragraph 32, lines 8-14; paragraph 40).

Consider **claim 22**; Attar discloses receiving one sub-frame of a plurality of sub-frames associated with a subsequent frame using at least the first wireless resource if a non-acknowledgement message associated with the second frame is transmitted, and using at least the first and the second wireless resources (code channels) if an acknowledgement message associated with the second frame is transmitted (a system that does not use acknowledgements and non-acknowledgements will make the claim invalid) (paragraph 31, lines 4-8; paragraph 32, lines 8-14; paragraph 40).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 5, 6, 9-13, 18-21, 23, 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Attar et al. (U.S. Patent Publication Number 2005/0020295)** in view of **Georgiou et al. (U.S. Patent Number: 4,845,704)**.

Consider **claims 5, 18**; Attar discloses transmitting sub-frames of frames in response to receiving the non-acknowledgement message associated with the first sub-frame associated with the first frame (paragraph 40) except: the second sub-frame of the first frame using the first wireless resource is transmitted concurrently with the transmitting of the first sub-frame from the second frame using the second wireless resource.

In an analogous art Georgiou discloses the second sub-frame of the first frame using the first wireless resource is transmitted concurrently with the transmitting of the first sub-frame from the second frame using the second wireless resource (frames are transmitted simultaneously) (abstract; column 5, lines 30-51).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching of Attar by including the transmission of frames simultaneously, as taught by Georgiou, for the purpose of providing a system with low cost, high capacity, and high growth potential.

Consider **claims 6, 19**; Attar discloses that at least one of the first and second frames comprises a plurality of incrementally redundant sub-frames (paragraph 40).

Consider **claim 9**; Attar discloses transmitting a subsequent sub-frame of the plurality of incrementally redundant sub-frames of the first frame in response to a non-acknowledgment message associated with a most recently transmitted sub-frame of the first frame (paragraph 40).

Consider **claim 10**; Attar discloses terminating the transmitting of remaining sub-frames of the plurality of incrementally redundant sub-frames of the first frame in response to receiving an acknowledgement message associated with a most recently transmitted sub-frame of the first frame (paragraph 40).

Consider **claim 11**; Attar discloses transmitting at least one sub-frame from a subsequent frame using at least the first wireless resource if a non-acknowledgement message associated with the second frame is received, and using at least the first and the second wireless resources if an acknowledgement message associated with the second frame is received (a system that does not use acknowledgements and non-acknowledgements will make the claim invalid) (paragraph 31, lines 4-8; paragraph 32, lines 8-14; paragraph 40).

Consider **claims 12, 23**; Attar discloses that the acknowledgement message associated with the second frame is received in response to the receipt of one the incrementally redundant sub-frames of the second frame (paragraph 40).

Consider **claims 13, 24**; Georgiou discloses at least one of a voice sub-frame, a video sub-frame and a wireless gaming sub-frame (abstract; column 5, lines 30-51).

Consider **claim 20**; Attar discloses that the first and second frames are assigned to a single user (access terminal) (paragraph 40).

Consider **claim 21**; Attar discloses awaiting reception of a subsequent sub-frame of the plurality of incrementally redundant sub-frames of the first frame in response to a non-acknowledgment message associated with a most recently received sub-frame of the first frame (paragraph 40).

Claims 7, 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Attar et al. (U.S. Patent Publication Number 2005/0020295)** in view of **Hakkinen et al. (U.S. Patent Application Number: 2004/0202147)**.

Consider **claim 7**; Attar discloses the claimed invention except: at least one of the first and second frames comprises at least one do-not-transmit sub-frame.

In an analogous art Hakkinen discloses that at least one of the first and second frames comprises at least one do-not-transmit sub-frame (paragraph 32).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching of Attar by including a DTX sub-frame, as taught by Hakkinen, for the purpose of improving performance in a telecommunication system.

Consider **claim 8**; Attar discloses that the first and second frames are assigned to a single user (access terminal) (paragraph 40).

Conclusion

Any response to this Office Action should be **faxed to (571) 273-8300 or mailed to:**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Hand-delivered responses should be brought to

Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Joel Ajayi whose telephone number is (571) 270-1091. The Examiner can normally be reached on Monday-Friday from 7:30am to 5:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Lester Kincaid can be reached on (571) 272-7922. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

Joel Ajayi

/Lester Kincaid/
Supervisory Patent Examiner, Art Unit 2617